

Lumber and Wood Products

**1995 TRI Releases for Lumber and Wood Products Facilities (SIC 24)
by Number of Facilities Reporting (pounds/year)***

Chemical Name	# Reporting Chemical	Fugitive Air	Point Air	Water Discharges	Underground Injection	Land Disposal	Total Releases	Avg. Releases Per Facility
Arsenic Compounds[C, M]	116	77	332	1,828	0	5	2,242	19
Copper Compounds[M]	116	87	346	2,024	0	5	2,462	21
Chromium Compounds[C, M]	111	78	334	1,886	0	0	2,298	21
Formaldehyde[C]	80	298,356	3,475,428	52,440	0	1,794	3,828,018	47,850
Methanol	68	867,604	13,231,711	527,768	0	19,400	14,646,483	215,389
Creosote[C]	62	332,409	428,173	8,289	0	250	769,121	12,405
Chromium[M]	61	240	485	424	0	0	1,149	19
Arsenic[C, M]	60	240	235	126	0	0	601	10
Copper[M]	59	235	235	207	0	0	677	11
Phenol	31	60,667	565,728	846	0	355	627,596	20,245
Diisocyanates	26	1,215	8,840	0	0	1,218	11,273	434
Pentachlorophenol[C]	25	1,814	4,423	2,069	0	250	8,556	342
Ammonia	23	420,258	787,438	133,155	0	2,300	1,343,151	58,398
Toluene	18	206,372	1,162,736	1,776	0	0	1,370,884	76,160
Xylene (Mixed Isomers)	18	40,413	1,033,568	0	0	0	1,073,981	59,666
Acetaldehyde[C]	15	13,233	1,693,747	5,399	0	2,066	1,714,445	114,296
Hydrochloric Acid (1995 and after "Acid Aerosols" Only)	13	250	849,094	0	0	5	849,349	65,335
Methyl Ethyl Ketone	12	8,586	713,870	678	0	0	723,134	60,261
Sulfuric Acid	11	0	587,384	0	0	5	587,389	53,399
Zinc Compounds[M]	7	0	2,011	29,405	0	473,005	504,421	72,060
Phosphoric Acid	7	245	2,385	0	0	0	2,630	376
Ethylbenzene	6	3,800	147,699	0	0	0	151,499	25,250
Methyl Isobutyl Ketone	6	31,619	90,179	0	0	0	121,798	20,300
Chlorine	6	2,036	43,153	16,293	0	0	61,482	10,247
Certain Glycol Ethers	5	51,906	44,800	0	0	0	96,706	19,341
Nitrate Compounds	5	0	0	114,665	0	50	114,715	22,943
N-butyl Alcohol	5	2,709	308,128	0	0	0	310,837	62,167
Catechol	5	0	0	1,323	0	255	1,578	316
Cresol (Mixed Isomers)	4	31	76,005	795	0	10	76,841	19,210
Formic Acid	3	0	0	0	0	0	0	0
Chloroform[C]	3	252,193	202,638	102,623	0	250	557,704	185,901
Naphthalene	3	1,165	327	0	0	0	1,492	497
Styrene[C]	3	7,413	60,897	285	0	0	68,595	22,865
Anthracene	3	2,268	317	0	0	0	2,585	862
Dibenzofuran	3	1,198	268	0	0	0	1,466	489
Chlorine Dioxide	3	80	90,231	0	0	0	90,311	30,104
Dichloromethane[C]	2	87,981	42,805	1	0	0	130,787	65,394
Methyl Methacrylate	2	25,632	2,279	0	0	0	27,911	13,956
1,2,4-trimethylbenzene	2	800	25,500	0	0	0	26,300	13,150
Ethylene Glycol	2	832	30,489	2,800	0	0	34,121	17,061
Tetrachloroethylene[C]	2	368	2,686	0	0	0	3,054	1,527
Nitric Acid	2	0	1,080	0	0	0	1,080	540
1,1,1-Trichloroethane[O]	1	250	750	0	0	0	1,000	1,000
Chloromethane	1	3	27,000	1	0	0	27,004	27,004
Dibutyl Phthalate	1	0	19,858	0	0	0	19,858	19,858
Quinoline	1	.	.	0	0	0	0	0
1,2,4-trichlorobenzene	1	0	17,833	0	0	0	17,833	17,833
Triethylamine	1	5	5	0	0	0	10	10
Asbestos (Friable)[C]	1	1	1	1	0	0	3	3
1,1-dichloro-1-fluoroethane[O]	1	4,970	15,066	0	0	0	20,036	20,036
Ozone	1	0	0	0	0	0	0	0
	397**	2,729,639	25,798,497	1,007,107	0	501,223	30,036,466	75,659

[C] Known or suspect carcinogens

[M] Metals and metal compounds

[O] Ozone depleters

* Refer to Section III for a discussion of the TRI data and its limitations, methodology used to obtain this data, definitions of the column headings, and the definitions of carcinogens, metals, and ozone depleters.

**Total number of facilities (not chemical reports) reporting to TRI in this industry sector.

**1995 TRI Transfers For Lumber and Wood Products Facilities (SIC 24)
by Number of Facilities Reporting (pounds/year)***

Chemical Name	# Reporting Chemical	Potw Transfers	Disposal Transfers	Recycling Transfers	Treatment Transfers	Energy Recovery Transfers	Total Transfers	Avg Transfer Per Facility
Arsenic Compounds[C, M]	116	5	58,192	.	12,011	750	70,958	612
Copper Compounds[M]	116	5	57,697	.	7,215	750	65,667	566
Chromium Compounds[C, M]	111	0	67,720	.	8,023	.	75,743	682
Formaldehyde[C]	80	520	1,722	.	1,234	2,084	5,560	70
Methanol	68	205	5,945	8,775	250	22,358	37,533	552
Creosote[C]	62	10,051	2,554,752	2,250	236,703	94,255	2,898,011	46,742
Chromium[M]	61	17	29,960	47,220	12,338	.	89,535	1,468
Arsenic[C, M]	60	4	27,670	.	8,888	.	36,562	609
Copper[M]	59	18	21,459	.	4,932	.	26,409	448
Phenol	31	1,112	282	255	.	.	1,649	53
Diisocyanates	26	5	718	.	7,725	.	8,448	325
Pentachlorophenol[C]	25	900	23,938	360	47,141	14,352	86,691	3,468
Ammonia	23	13,086	1,760	.	25	15	14,886	647
Toluene	18	0	2,403	11,363	11,900	75,717	101,383	5,632
Xylene (Mixed Isomers)	18	5	830	18,002	650	97,846	117,333	6,519
Acetaldehyde[C]	15	0	286	5	.	.	291	19
Hydrochloric Acid (1995 and after "Acid Aerosols" Only)	13	0	.	101,200	.	.	101,200	7,785
Methyl Ethyl Ketone	12	0	617	4,495	.	29,036	34,148	2,846
Sulfuric Acid	11	0	.	.	.	.	0	0
Zinc Compounds[M]	7	5	82,250	.	1,250	750	84,255	12,036
Phosphoric Acid	7	0	.	.	.	.	0	0
Ethylbenzene	6	0	.	2,883	250	11,533	14,666	2,444
Methyl Isobutyl Ketone	6	0	.	8,671	.	72,732	81,403	13,567
Chlorine	6	0	.	.	.	.	0	0
Certain Glycol Ethers	5	0	.	250	5	4,545	4,800	960
Nitrate Compounds	5	0	260	.	.	.	260	52
N-butyl Alcohol	5	0	.	5,082	250	18,308	23,640	4,728
Catechol	5	0	22	.	.	.	22	4
Cresol (Mixed Isomers)	4	0	252	.	.	.	252	63
Formic Acid	3	0	.	.	.	.	0	0
Chloroform[C]	3	0	10	.	.	.	10	3
Naphthalene	3	2,840	250	56,532	.	250	59,872	19,957
Styrene[C]	3	5	2,931	.	255	.	3,191	1,064
Anthracene	3	256	250	16,420	.	750	17,676	5,892
Dibenzofuran	3	253	250	25,306	.	250	26,059	8,686
Chlorine Dioxide	3	0	.	.	.	.	0	0
Dichloromethane[C]	2	5	15	.	5,425	.	5,445	2,723
Methyl Methacrylate	2	296	.	.	.	.	296	148
1,2,4-trimethylbenzene	2	0	.	.	.	2,370	2,370	1,185
Ethylene Glycol	2	0	.	.	.	.	0	0
Tetrachloroethylene[C]	2	5	5	5	5,425	.	5,440	2,720
Nitric Acid	2	0	.	.	.	.	0	0
1,1,1-Trichloroethane[O]	1	0	.	.	.	.	0	0
Chloromethane	1	0	.	.	.	.	0	0
Dibutyl Phthalate	1	0	.	504	.	1,465	1,969	1,969
Quinoline	1	0	.	.	.	250	250	250
1,2,4-trichlorobenzene	1	0	.	.	.	.	0	0
Triethylamine	1	0	.	.	.	.	0	0
Asbestos (Friable)[C]	1	0	10,478	.	.	.	10,478	10,478
1,1-dichloro-1-fluoroethane[O]	1	0	.	.	1,278	.	1,278	1,278
Ozone	1	0	.	.	.	.	0	0
	397**	29,598	2,952,924	309,578	373,173	450,366	4,115,639	10,367

[C] Known or suspect carcinogens

[M]Metals and metal compounds

[O] Ozone depleters

* Refer to Section III for a discussion of the TRI data and its limitations, methodology used to obtain this data, definitions of the column headings, and the definitions of carcinogens, metals, and ozone depleters.

**Total number of facilities (not chemical reports) reporting to TRI in this industry sector.

Ten Largest Volume TRI Releasing Lumber and Wood Facilities Reporting Only SIC 24*		
Rank	Facility¹	Total TRI Releases in Pounds
1	Fiber Prods. Ops., Diboll, Texas	490,005
2	Roseburg Forest Prods., Dillard, Oregon	468,890
3	Afco Ind. Inc., Holland, Michigan	438,160
4	International Paper, Nacogdoches, Texas	384,322
5	Potlatch Corp., Bemidji, Minnesota	367,194
6	Willamette Ind. Inc., Bennettsville, South Carolina	326,760
7	Plum Creek Mfg. L.p., Columbia Falls, Montana	315,250
8	Georgia-Pacific Corp., Catawba, South Carolina	289,563
9	ABT Co. Inc., Roaring River, North Carolina	278,015
10	Potlatch Corp., Cook, Minnesota	239,022

Source: *US EPA 1995 Toxics Release Inventory Database*.

*Refer to Section III for a general discussion of TRI data and its limitations. A discussion of the methodology used to develop this table can be found under the heading *Ten Largest Volume TRI Releasing Facilities*.

Ten Largest Volume TRI Releasing Facilities Reporting Only SIC 24 or SIC 24 and Other SIC Codes*			
Rank	Facility¹	SIC Codes Reported in TRI	Total TRI Releases in Pounds
1	Weyerhaeuser Co., Longview, Washington	2421, 2429, 2493, 2611, 2621, 2812	5,705,746
2	Union Camp Corp., Franklin, Virginia	2493, 2611, 2621, 2631, 2679	3,109,682
3	Weyerhaeuser Co., Springfield, Oregon	2436, 2499, 2631	2,436,284
4	Potlatch Corp., Lewiston, Idaho	2421, 2429, 2611, 2621, 2631	1,850,510
5	Macmillan Bloedel Packaging, Pine Hill, Alabama	2421, 2436, 2621	1,377,468
6	Broyhill Furniture Ind. Inc., Lenoir, North Carolina	2493, 2511	1,227,679
7	Broyhill Furniture Ind. Inc., Lenoir, North Carolina	2435, 2436, 2511	597,794
8	Fiber Prods. Ops., Diboll, Texas	2493	490,005
9	Roseburg Forest Prods., Dillard, Oregon	2435, 2436	468,890
10	Afco Ind. Inc., Holland, Michigan	2493	438,160

Source: *US EPA Toxics Release Inventory Database, 1995*.

*Refer to Section III for a general discussion of TRI data and its limitations. A discussion of the methodology used to develop this table can be found under the heading *Ten Largest Volume TRI Releasing Facilities*.

¹ Being included on this list does not mean that the release is associated with non-compliance with environmental laws.

Source Reduction and Recycling Activity for Lumber and Wood Products Facilities (SIC 24) as Reported within TRI*									
A	B	C	On-Site			Off-Site			J
Year	Quantity of Production- Related Waste (10 ⁶ lbs.) ^a	% Released and Transferred ^b	D	E	F	G	H	I	% Released and Disposed ^c Off-site
			% Recycled	% Energy Recovery	% Treated	% Recycled	% Energy Recovery	% Treated	
1994	156	105%	9%	4%	64%	0%	0%	0%	23%
1995	137	25%	22%	5%	48%	0%	0%	0%	26%
1996	133	---	18%	6%	51%	0%	0%	0%	25%
1997	132	---	18%	6%	52%	0%	0%	0%	23%

Source: 1995 Toxics Release Inventory Database.

* Refer to Section III for a general discussion of TRI data and its limitations. A discussion of the methodology used to develop this table can be found under the heading *Source Reduction and Recycling Activity*.

^a Within this industry sector, non-production related waste < 1% of production related wastes for 1995.

^b Total TRI transfers and releases as reported in Section 5 and 6 of Form R as a percentage of production related wastes.

^c Percentage of production related waste released to the environment and transferred off-site for disposal.

Five-Year Enforcement and Compliance Summary for the Lumber and Wood Industry*									
A	B	C	D	E	F	G	H	I	J
Region	Facilities in Search	Facilities Inspected	Number of Inspections	Average Months Between Inspections	Facilities with 1 or More Enforcement Actions	Total Enforcement Actions	Percent State Lead Actions	Percent Federal Lead Actions	Enforcement to Inspection Rate
I	14	9	21	40	4	4	75%	25%	0.19
II	19	10	37	31	2	3	67%	33%	0.08
III	82	57	406	12	14	47	87%	13%	0.12
IV	238	154	1,106	13	45	67	75%	25%	0.06
V	134	85	399	20	26	52	62%	38%	0.13
VI	82	51	292	17	16	48	56%	44%	0.16
VII	24	20	87	17	3	3	67%	33%	0.03
VIII	23	17	69	20	5	10	80%	20%	0.14
IX	32	21	105	18	6	9	67%	33%	0.09
X	64	49	245	16	13	22	64%	36%	0.09
TOTAL	712	473	2,767	15	134	265	70%	30%	0.10

*Data obtained from EPA's Integrated Data for Enforcement Analysis (IDEA) System. For a description of IDEA and the methods used to obtain this data, refer to Section II.C. A discussion of this table can be found under the heading, *Five-Year Enforcement and Compliance Summary*, in Section III.